City of Seattle

ANALYSIS AND DECISION BY THE SUPERINTENDENT
OF THE DEPARTMENT OF PARKS AND RECREATION

Proposal Name: **Pacific Connections Garden Project**

Address of Proposal: **Washington Park Arboretum, 2300 Arboretum Drive East**

SUMMARY OF PROPOSED ACTION
The proposed project is the first major element in the approved Arboretum Master Plan. It involves the establishment of botanical exhibits displaying plants from five geographic regions, the removal of existing vegetation and trees, the construction of pathways and a new parking area.

SEPA DETERMINATION: Determination of Non-Significance (DNS)

BACKGROUND

The Washington Park Arboretum is located on the shores of Lake Washington just east of downtown Seattle and south of the University of Washington. It is Washington's official State Arboretum and contains internationally recognized woody plant collections on 230 acres. Noteworthy are North America's largest collection of *Sorbus* and Maple, the second largest collection of species Hollies and significant collections of oaks, conifers and camellias.

The Washington Park Arboretum was established in 1934 by an agreement approved by both the University of Washington and the City of Seattle (City Council/Mayor). The City of Seattle held title to a 200+ acre park known as Washington Park located in a central portion of the city. It agreed that the University could design, construct, plant, and manage an Arboretum and Botanical Garden in this park. The Arboretum Foundation was founded in 1935 and has been an active support group ever since. The University of Washington Botanic Gardens manages the plant collections while the City of Seattle holds title to most of the land and buildings. Seattle Parks and Recreation manages the park functions of the Arboretum. The Arboretum Foundation is the support organization for the Arboretum and provides membership and volunteering opportunities, and is raising money for the implementation of the Arboretum Master Plan.

In 1936, the Seattle Garden Club donated $3,000 to hire James F. Dawson and Frederick Law Olmsted, Jr. of the Olmsted Brothers landscape firm to design the first planting plan. Mr. Dawson was the chief designer of the plan. During those early years when the nation was in deep depression, 500 men in the Public Works Administration constructed many of the historical features; e.g., the Stone Cottage, and Azalea Way. The Dawson plan followed the typical phylogenetic progression of families from primitive to advanced, as accepted in that day. However, the majority of the accessions to the collections occurred during the years after World War II, when the late Brian O. Mulligan was director. His modifications to the

original design led to many plants being culturally better sited, and gardens, such as the Winter and Woodland Gardens, with an emphasis on design focus.

During the 1970's, disagreements arose regarding the roles and interests of the University, the City, and the Arboretum's immediate neighborhood. As a result, the University and City negotiated a more detailed working partnership, summarized in 1974 in a Letter of Clarification to the 1934 Agreement. In 1980, the University reaffirmed its managerial role by establishing the Center for Urban Horticulture (CUH) at Union Bay, at a campus site only 1.5 miles from the Arboretum. Establishment of the Center, to provide physical facilities, programs, and staff that could not be accommodated within the Arboretum grounds, was essential to fulfilling its larger mission, and was mandated by the 1978 Master Plan Update. Today, the Arboretum is managed in association with the Center for Urban Horticulture which has continued to clarify and expand the Arboretum's aims and programs.

In the late 1980's, discussion intensified about the future of the Arboretum itself, including the need for a new strategic Master Plan. A new collections policy had been enacted, the educational and interpretation programs were greatly expanded, new facilities at both the Union Bay and Arboretum sites had been constructed, and the use of the plant collections by the University and other area educational institutions had greatly increased. The age of the collections, the location within an affluent urban area and the need for diversification of public programs were key elements for future planning.

In May 2001, the Seattle City Council approved the current long-range master plan for the Washington Park Arboretum that will serve as a road map for improvements at the Arboretum for the next 20 years. Seattle Parks and Recreation, the University of Washington and the Arboretum Foundation developed the plan over the period from 1994 to 2001. The master plan ensures the Washington Park Arboretum will effectively fulfill three primary purposes—conservation, recreation and education—for decades to come. Key elements include renovation of 30 existing plant exhibits and creation of 21 new plant exhibits; reorientation of some pedestrian trails; construction of a pedestrian/bicycle trail along Lake Washington Blvd.; renovation and expansion of existing facilities in the vicinity of the Graham Visitors Center; construction of a new pavilion and entrance to the Japanese Garden; addition of two pedestrian overpasses, one across Lake Washington Blvd. and one across Foster Island Dr.; traffic flow improvements; and other minor modifications.

The plan results from collaboration among Seattle Parks and Recreation, the University of Washington, and the Arboretum Foundation, and the Arboretum's neighbors and supporters. The plan was the subject of extensive public review and comment. Between 1994 and 2001, more than 4,500 citizens commented through public workshops and meetings, focus groups, forums, open houses, public hearings and the environmental review process – and all of these comments have helped shape the final plan. The master plan responds to a host of issues that have arisen during the past 20 years concerning collections, traffic, conservation, education, public safety, recreation, and visitor services. Some of the original plant collections have matured and many trees are dying. These natural resources require improved conditions and special care to thrive. Barrier-free access to public spaces needs to be updated to meet legal requirements. Visitor services, security, and educational and community programs are essential to the Arboretum's public service mission.

The Pacific Connections Garden project will be the first major step to implement the Master Plan. After significant public involvement, Parks, the UW and Foundation chose this project

because of its visibility and the ability to fulfill the primary elements of the master plan - conservation, education and recreation.

PROJECT DESCRIPTION

Parks, along with the UW and the Foundation is proposing to create a series of new botanical exhibits at the south end of the Washington Park Arboretum. The proposed improvements would modify the existing Arboretum plant collections and provide new plant exhibits, educational signs and trails. The project would relocate the existing collection of Holly trees from the project area to an area bounded by the eastern side of Lake Washington Boulevard and the western boundary of the Arboretum, and between East Interlaken Boulevard and Boyer Ave East. The project would also create five new botanic exhibits in approximately fifteen acres of the Arboretum. The botanic collections (geographic exhibits) would be composed of plants found in parts of other countries with a similar climate to the Puget Sound region.

The existing rockery at the intersection of Lake Washington Boulevard and Arboretum Drive would be uncovered and rehabilitated. New construction includes a 300 square-foot education shelter with a green roof, a 30-car parking lot, and a series of walking paths through and connecting the plant exhibits. The project would also provide irrigation to the new plantings. Site access and automobile circulation would remain in the same locations as at present. The Master Plan calls for no increase in the number of parking spaces. At least 30 existing spaces would be removed during future work along Arboretum Drive. No additional lighting is proposed as part of the project. The proposed improvements would support new and existing research activities and would also encourage increased use for public recreation, supporting the Master Plan's goals for education, conservation and recreation.

More specifically, the project area is approximately fifteen (15) acres at the south end of the Washington Park Arboretum. The project consists of the phased development of the following elements:

- Five new eco-geographic botanical collections, containing plant species from other countries with climates similar to the Puget Sound region;
- Relocating the Holly collection, a botanical exhibit of Holly trees and shrubs, from its current location in the project area to an area along the east side of East Lake Washington Boulevard, between East Interlaken Boulevard and Boyer Street East, to accommodate the new eco-geographic botanical collections;
- A porous-concrete paved parking lot for 30 cars;
- A grass meadow with an open-walled interpretive shelter, covered with a green roof;
- Freestanding interpretive signs;
- Crushed-stone pedestrian pathways;
- Small (under 3 feet tall) retaining walls support pathways traversing the slopes; and
- Stone stairways to connect paths.

Included in the project is the removal of approximately 550 trees. The trees to be removed include "native matrix" forest that consists of trees, shrubs and ground covers that are largely self-seeded. The balance of vegetation is UW collections that encompass a range of

species, including the Holly collection. Portions of the Holly collection would be relocated to an area on the west side of Lake Washington Blvd. between Interlaken Blvd. and Boyer St. Removal of the trees will be phased over the duration of the project, which may take seven to ten years, and occur as collections are replanted and/or new plants are ready to be planted. The new Holly exhibit will require the removal of 55-65 trees and will include 120 Holly species. Many of the healthy conifers in the area of the Holly collection are to be retained. Throughout the project site, approximately 484 existing trees will be protected and preserved and new plantings include approximately 487 trees, 456 shrubs and 98,546 groundcover plants.

ANALYSIS – SEPA

Initial disclosure of potential impacts from this project was made in the applicant's Environmental Checklist, dated April 19, 2007. The basis for this analysis and decision is formed from information in the Checklist, information and studies contained in the appendices attached to it, a site visit and the lead agency's experience with review of similar projects.

The SEPA Overview Policy (SMC 23.05.665) discusses the relationship between the City's code/policies and environmental review. The Overview Policy states, in part, "[w]here City regulations have been adopted to address an environmental impact; it shall be presumed that such regulations are adequate to achieve sufficient mitigation". The Policies also discuss in SMC 23.05.665 D1-7, that in certain circumstances it may be appropriate to deny or mitigate a project based on adverse environmental impacts. This may be specified otherwise in the policies for specific elements of the environment found in SMC 25.05.675. In consideration of these policies, a more detailed discussion of some of the potential impacts is appropriate.

Short Term Impacts

The following temporary or construction-related impacts are expected: hydrocarbon emissions from construction vehicles and equipment; increased dust caused by construction activities; potential soil erosion and potential disturbance to subsurface soils during site work; increased traffic from construction equipment and personnel; increased noise; and consumption of renewable and non-renewable resources.

Several adopted codes and/or ordinances provide mitigation for some of the identified impacts. The Stormwater, Grading and Drainage Control Code requires that soil erosion control techniques be initiated for the duration of construction. Erosion will be prevented by implementation of a required Temporary Erosion Control and Sedimentation Plan. Best Management Practices, such as mulching and seeding will be implemented at the site to minimize erosion during construction. Puget Sound Clean Air Agency regulations require control of fugitive dust to protect air quality. The Building Code provides for construction measures and life safety issues. The Noise Ordinance regulates the time and amount of construction noise that is permitted in the city. Compliance with these codes and/or ordinances will lessen the environmental impacts of the proposed project. However, the presence of a federally listed species in the Arboretum, the proximity of recreational uses and the site itself warrant further discussion of potential noise and recreation impacts.

Construction activities will be predominantly confined to weekdays. Hours of construction are limited by the Seattle Noise Ordinance, SMC ch. 25.08, to 7:00 a.m. and ten 10:00 p.m. on

weekdays (SMC 25.08.425). The reality of the local construction industry is that most contractors work from 7 a.m. to 4 p.m.; the likelihood that any construction activities will occur up to 10 p.m. is slight. The Noise Ordinance also regulates the loudness (dB) of construction activities, measured fifty (50) feet from the subject activity or device. The City has dedicated Noise inspectors to monitor construction activities and respond to construction complaints. Compliance with the City's Noise Ordinance will prevent any significant adverse short term noise impacts and thus no further conditioning is necessary or warranted.

There is adequate on site parking for the construction crews and equipment. The checklist indicates that over the life of the project, as much as 4,700 cubic yards of material may be imported, including permeable rock as a base for the porous concrete, and mulch for soil amendments and top dressing. The site is nearby to several arterials which provide convenient truck access consistent with the requirements of the Street Use Ordinance. The amounts indicated in the checklist will be imported during the seven to ten year project life. Individual construction phases may cause short-term disruptions, but the construction traffic impacts are not anticipated to be significant, particularly given the surrounding traffic volumes.

Informal recreation currently occurs on the site. The area is used for many passive and educational activities such as bird watching, walking and plant viewing. Individual construction phases are expected to last between two and six months. The immediate site subject to construction activities will be closed during construction. However, the remainder of the Arboretum will remain open to the public. Construction area(s) and detour routes and alternate viewing sites will be publicized as part of the Arboretum's ongoing outreach activities. Thus, no significant adverse recreation impacts are anticipated and no mitigation is warranted or necessary.

Bald eagles are present in the Arboretum. Bald eagles are State and Federally listed and protected species. As such, a search of the Washington State Department of Fish & Wildlife's (WDFW) Priority Species and Habitat data base was made and an on the ground survey done. These nest sites are located near or north of the Graham Visitors Center, which is more than 800 feet from the project site. Generally, work within 800 feet of an active nest is subject to the requirements of a Bald Eagle Management Plan. Based on the search and site survey, there are no State or Federally listed species in the project area or in such proximity to the project area to warrant any mitigation and/or management plan. Given that the project site is located more than ½ mile from the nest sites and separated by topography and vegetation, a Bald Eagle Management Plan will not be required during construction. Thus, no short-term significant adverse wildlife impacts are anticipated and no mitigation is warranted or necessary.

Compliance with applicable codes, ordinances and regulations will be adequate to achieve sufficient mitigation.

Long Term Impacts

Stormwater

The Checklist indicates that stormwater will be managed according to "low impact development" (LID) best management practices. These practices aim to restore the natural

hydrologic balance of the site by maximizing use of infiltration capacities in the soil. Stormwater will be dispersed rather than collected and concentrated. Runoff will include stormwater overflow from the porous concrete parking lot underdrains and from the crushed rock paths. This water will flow into areas of compost-amended soil for infiltration into native soil. Additionally, the vast majority of the project area is comprised of pervious soil and will remain so after the project is complete.

As specified in the Checklist, during construction, BMPs in accordance with City of Seattle standards will be implemented to ensure that sediment originating from disturbed soils would be retained within the limits of disturbance and to minimize the potential for erosion.

No significant adverse stormwater impacts are anticipated and thus no mitigation is warranted or necessary.

ECA

Within the project site there are areas which are considered Environmentally Critical Areas (ECA) because the slopes exceed forty (40) percent. Limited work may occur on or adjacent to the Steep Slope ECA's for the construction of pathways or planting. The submitted Geotechnical Report states that "[o]n most of the site, there is weathered residual soil composed of sand and silt that is underlain by dense or stiff native soils. The native soils will be suitable for support of the paved parking lot, the foundations for the Interpretive Shelter and interpretive sign foundations, the pedestrian pathways, retaining walls, and stairways with minor removal of loose surface fills. In general, the new pavement sections, retaining walls and foundations should be underlain by dense or stiff natural soil or compacted structural fill that is placed after any unsuitable soil has been removed. The native glacial soils could be used as fill in some areas during dry weather construction but they do not drain quickly and therefore are not suitable for wet weather work." The report concluded that "[t]here appears to be no geotechnical constraints that would preclude project construction as planned." Geotechnical Report @ p. 5. Thus no adverse ECA related impacts from the proposed construction and subsequent use are anticipated. The Arboretum is also overlaid with a Fish & Wildlife Habitat ECA. The project does not involve work in or adjacent to any streams or wetlands so no impacts to fish habitat are anticipated. The potential for adverse Wildlife impacts are discussed below.

Compliance with the City's ECA Ordinance will adequately mitigate the potential for any adverse ECA related environmental impacts associated with this project and thus no conditioning is necessary or warranted.

Wildlife

As indicated above, there is at least one Bald eagle's nest located in or adjacent to the Arboretum. Bald eagles are State and Federally listed and protected species. As previously indicated, a search of the WDFW's Priority Species and Habitat data base was made and an on the ground survey done. Based on the search and site survey, there are no State or Federally listed species in the project area or in such proximity to the project area to warrant any mitigation and/or management plan. Thus, no long-term significant adverse wildlife impacts are anticipated and no mitigation is warranted or necessary.

Open Space/Access to Recreation

The Washington Park Arboretum totals approximately 230 acres. The Pacific Connections Garden project involves approximately fifteen (15) acres over the life of the project. There will be localized impacts to recreation and open space during each of the construction phases. However, the total area is but a small percentage of the total area and the localized construction sites will be smaller still. Upon completion, access to passive recreation and open space will be enhanced through an improved trail system and reorganized and expanded collections. Thus, no significant adverse open space impacts are anticipated and no mitigation is warranted or necessary.

Plants

Over the life of the project, approximately 550 trees will be removed. The trees to be removed include "native matrix" forest that consists of trees, shrubs and ground covers that are largely self-seeded. Approximately 484 existing trees will be protected and preserved in accordance with Parks' tree protection and preservation standards including protecting the trunks and insuring the root zone does not become compacted during adjacent construction activities. New plantings will include approximately 487 trees, 456 shrubs and 98,546 groundcover plants.

At the outset of the project, the removal of trees will be the most visible component. The first phase of construction would remove approximately ninety-five (95) trees for construction of the Meadow and part of the Cascadia plant exhibit. Some of the trees to be removed are diseased and/or in decline due to age. The Arboretum is not a natural forest, it is a plant collection managed to preserve and protect worldwide species and to provide education opportunities for the students of the University of Washington, and citizens of this state and beyond. Trees being removed will be replaced and additional plantings will be incorporated into the collections. Existing trees to be saved will be protected during construction. Upon completion of the project, overall plant health will be improved as the collections are replanted and re-grouped, areas are opened up such that trees have better access to light and air, and the species palate becomes more diverse. Thus, no significant adverse plant related impacts are anticipated and thus no mitigation is warranted or necessary.

Historic Preservation

The Pacific Connections Garden project primarily impacts the plant collections, which are managed by the UW. While the first planting plan for the Washington Park Arboretum was prepared by Olmsted Brothers landscape firm in 1936, the majority of the accessions to the collections occurred during the years after World War II, when modifications to the original design led to many plants being selected which were culturally better sited, and gardens planted, such as the Winter and Woodland Gardens, with an emphasis on design focus. The *Agreement Relating to Arboretum and Botanical Garden in Washington Park* (1936) granted the UW the right to use the park for an arboretum and botanical garden. Since the UW is governed by and accountable to the State appointed Board of Regents, the University uses its policies and procedures when considering impacts to their collections. When the University undertakes deliberate changes or additions to the collections, compliance with the goals of the Washington Park Arboretum Master Plan, the health of the collection and the historic value of the collection are considered.

As indicated in the Checklist, the proposed project does not involve any construction activities that would adversely affect designated landmarks or historic properties. The

Washington Park Arboretum Historic Resources Strategy (2006) considered the effects of this project on the elements that appeared to meet the criteria of the Seattle Landmarks Preservation ordinance. In general, the project consists of in-kind replacement of landscaping. The Holmdahl Rockery is currently obscured from view by overgrown vegetation. It would be rehabilitated through in-kind replacement of landscaping. No realignment or change in size is proposed for Arboretum Drive. The new 30-car parking lot would be located off of Arboretum Drive, screened from view. Construction of this lot would allow this project and future projects to remove and consolidate existing spaces that were not part of the original Olmsted plan. The new lot would be better screened from Arboretum Drive. Consolidation of parking along the Drive would have a beneficial impact. Thus, no significant adverse historic preservation impacts are anticipated and thus no mitigation is warranted or necessary.

Upon completion of the project, no long term adverse environmental impacts are anticipated and thus no conditioning is necessary or warranted. Additionally, The Pacific Connections Garden project is a component of the Arboretum Master Plan which itself was the subject of environmental review consistent with the requirements of the State Environmental Policy Act. A Final Environmental Impact Statement was issued for the Master Plan on January 4, 2001 and the analysis contained therein is hereby incorporated by reference. In the EIS, the Pacific Connections project is a component of the Madrona Terrace – South Entry project. Impacts associated with the Pacific Connections project were considered in the EIS and the impacts identified within the project specific checklist are within those considered in the EIS. As such, it is appropriate that a project level Determination of Non-significance be issued.

DECISION

This decision was made after the responsible official, on behalf of the lead agency, reviewed a completed environmental checklist and other information on file with the responsible department. This constitutes the Threshold Determination and final decision on application of SEPA's substantive authority and mitigation provisions. The intent of this declaration is to satisfy the requirement of the State Environmental Policy Act (RCW 43.21.C), including the requirement to inform the public of agency decisions pursuant to SEPA.

(**X**) Determination of Non-Significance. This proposal has been determined to not have a significant adverse impact upon the environment. An EIS is not required under RCW 43.21C.030(2)(C).

( ) Determination of Significance. This proposal has or may have a significant adverse impact upon the environment. AN EIS is required under RCW 43.21C.030(2)(C).

Signature: _____

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Seattle Department of Parks and Recreation

Date: 19 April, 2007